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### REMARKS

Reconsideration of the above-identified application in view of the amendments above and the remarks following is respectfully requested. Claims 1-14 are in this case. Claims 3 and 14 have been rejected under § 112. Claims 1-14 have been rejected under § 103. Independent claim 1 has been amended. Claims 2-6 and 8-14 have been cancelled.

The Applicant believes that the claims before the Examiner now correspond substantially to allowable subject matter, as will be detailed below.

### Objections

#### Drawings

The Examiner has objected to the drawings.

With regard to Figure 4, the Applicant has corrected the drawings in accordance with the Examiner's suggestions. In amended Figure 4, in boxes S144 and S147, the words "POSER" and "LED1" have been amended to "POWER" and "LED1." The Applicant believes that this amendment remedies the clerical defect pointed out by the Examiner.

The Amended Figure 3A includes exactly one change – in step S90, the equation  $T_s > T_r - T_1$  has been replaced with  $T_s > T_r + T_1$ . The original figure included a clerical mistake, and the present amendment is supported by principles for operation of thermostats commonly known in the art. The Applicant believes that this amendment remedies the clerical defect pointed out by the Examiner.

The Amended Figure 3B includes exactly one change – in step S190, the equation  $T_s < T_r + T_2$  has been replaced with  $T_s < T_r - T_2$ . The original figure included a clerical mistake, and the present amendment is supported by principles for

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operation of thermostats commonly known in the art. The Applicant believes that this amendment remedies the clerical defect pointed out by the Examiner.

The examiner has noted that the following reference character(s) are not mentioned in the description: 63, S20 and S89. The specification has been amended to include these reference characters (see paragraphs 34, 55 and 109).

#### Specification

The Applicant acknowledges the Examiner's objections to Page 6, lints 18-19; Page 12, line 3; Page 17, paragraph 76, page 11, paragraph 40; Page 14, line 21 and Page 22, line 1.

With regard to Page 12, lines 22-23, the Applicant does not understand the Examiner's rejection, and respectfully requests further clarification.

In addition, the Applicant has amended clerical errors in paragraphs 48, 50, 65, 66, 67, 80, 81, 82 and 92. These amendments do not introduce new matter, and are supported by principles for operation of thermostats commonly known in the art.

The Applicant has provided replacement paragraphs which the Applicant believes addresses the Examiner's objections to the specification.

#### Claims

The Applicant has amended claim 1, and believes that the amended claims render moot the Examiner's objections to the claims. Other objected to claims have been cancelled, rendering the Examiner's objections moot.

#### § 112 Rejections

The Examiner has rejected dependent claims 3 and 14 under 35 USC 112 second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner's rejections are respectfully traversed.

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While continuing to traverse the Examiner's rejections, and without in any way prejudicing the patentability of the rejected claims, the Applicant has, in order to expedite the prosecution, chosen to cancel claims 3 and 14.

#### **§ 102(b) Rejections**

The Examiner has rejected claims 1, 4, 8 and under 35 US 103 as being unpatentable over Brown et al (US Pat 5,224,649) in view of Rhodes et al (US Pat 6,164,374). The Examiner has rejected claims 2, 3, 5-7, 9 and 11-14 under 35 US 103 as being unpatentable over Brown et al as modified by Rhoes as applied to claims 1 and 10, and further in view of Nelson et al (US Pat 5,350,114). While continuing to traverse the Examiner's rejections, and without in any way prejudicing the patentability of the rejected claims, the Applicant has, in order to expedite the prosecution, chosen to cancel claims 2-6 and 8-14.

While continuing to traverse the Examiner's rejections, and without in any way prejudicing the patentability of the rejected claims, the Applicant has, in order to expedite the prosecution, chosen to amend claim 1.

The Applicant respectfully submits that these claim amendments render the Examiner's rejections moot, and that all claims presently presented are patentable.

#### **Amended Claim 1**

Claim 1 has been amended to include a number of additional limitations. No new matter has been added. In claim element (b), the phrase "lower than the set temperature by less than a predetermined temperature" has been amended to read "lower than the set temperature by more than a predetermined temperature" in order to correct a clerical error. This amendment does not introduce new matter, and is supported by principles for operation of thermostats commonly known in the art.

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Furthermore, the added claim element “a temperature display selection unit for selectively displaying the indoor temperature displayed through the temperature display unit by Celsius (C) or Fahrenheit (F)” derives support from claim 3 of the original application as filed. Claim element “a fire sensing unit for sensing an ignition state of the burner by sensing a fire sensitivity in the burner” derives support from claim 6 of the original application as filed. Claim element “thermistor for sensing the indoor temperature changed in real time” derives support from claim 8 of the original application as filed. Claim element “a temperature sensing unit for sensing a temperature of the burner that rises according to a combustion operation of the burner” derives support from claim 9 of the original application as filed. Claim element “wherein the display unit comprises: (i) a temperature display unit for displaying the indoor temperature inputted in real time in accordance with the control signal from the microcomputer. and (ii) an ignition state display unit for displaying a ignition state of the burner through a power LED in accordance with the control signal from the microcomputer; wherein the microcomputer checks: (A) the various kinds of error modes occurring while the burner is driven, and if an error occurs, the microcomputer displays the error mode by flickering the power LED at predetermined intervals” derives support from claim 5 of the original application as filed. Claim element “(B) error modes occurring due to a failure of an initial ignition of the burner and an incomplete combustion of the burner by checking a voltage value inputted from the fire sensing unit” derives support from claim 6 of the original application as filed. Claim element “(C) an error mode occurring due to disconnection of the thermistor by checking a voltage value inputted from the thermistor” derives support from claim 8 of the original application as filed. Claim element “(D) an error mode

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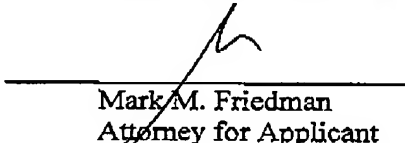
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occurring due to overheat of the burner by checking a voltage value inputted from the temperature sensing unit" derives support from claim 9 of the original application as filed.

In view of the above amendments and remarks it is respectfully submitted that independent claim 1, and hence also dependent claims 7, are in condition for allowance. Prompt notice of allowance is respectfully and earnestly solicited.

Respectfully submitted,

  
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